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Mr. Michael Wilhelm, Chief
Public Safety and Critical Infrastructure Bureau
Federal Communications Commission
445 12th Street S.W.
Washington, DC 20554

Ex-Parte Comments filed under FCC Docket 96-86 addressing the needs for public safety to utilize wideband 700 MHz allocations wider than 150 KHz utilized, managed at the regional level when necessary.

Dear Mr. Wilhelm,

The National Association of Regional Planning Committees hereby submits the following Ex-Parte Comments regarding FCC Proceeding 96-86, in order to provide the Commission input from the public safety user community on advantages offered by 700 MHz wideband data channel aggregation and how, by aggregating wideband 700 MHz channel bandwidths above 150 KHz, important local public safety broadband data and interoperability needs can be met.

As background, the National Association of Regional Planning Committees (NARPC) is a regional planning advocacy body dedicated to promoting the voice of the distinct and varied public safety communications needs of the Commission's fifty-five (55) designated regional planning committee areas. The NARPC does not seek consensus from regional planning committees on critical public safety communications before them, but rather acts to educate regions of the public safety communications issues before them and encourages each regional planning committee to file comments with the Commission on *their perspective* of the issues and provide the Commission the details as to how that individual region may be impacted, positively or negatively, on the Commissions decision. The goal of the NARPC is to promote the voice of regional planning committees and "on the ground" state and local public safety representatives and users so the voice of this community can be heard. Acknowledging the disparate and diverse needs of the Nation's public safety community is important and it has chosen outreach and education as its tools rather than to seek consensus from this important user community. It is the

NARPC position that consensus cannot be reached within the public safety user community on all important public safety issues without alienating a portion of the same community it attempts to serve.

Meeting future spectrum needs of the First Responder Community might be better addressed while considering new paradigms of use for existing public safety resources. Commercial wireless technologies today offer users tremendous throughput and file sharing capabilities. Commercial wireless providers have developed technologies that use wider channel bandwidths than traditionally used for voice service to meet new data needs by continually addressing their spectrum resources, aggregating channels and seeking methods of increasing spectrum efficiency while concurrently offering new products to their customers in a competitive marketplace. Their abilities to proactively address both their needs and their available resources are required in today's growing wireless communications market. Multiple voice and data technologies and schemes available in the commercial wireless market require channel bandwidths of varying size to be effective and all indications are that these new channels, wider than traditional narrowband voice/low speed data channels, and the technologies and functionality they bring will continue to offer solutions and options to commercial wireless providers in meeting the needs of their customers. Public safety should also be permitted to periodically review its spectrum needs and to evaluate whether or not their existing spectrum resources can be better utilized in a more flexible, dynamic environment.

Wideband data channels are currently allocated to public safety within the 764-776 MHz/794-806 MHz band in channel bandwidths of 50 KHz with permissible aggregation up to 150 KHz. These channel bandwidths were developed within the National Coordination Committee (NCC) several years ago as a solution to address public safety wideband data requirements. At the time, these channel bandwidths were anticipated to be capable of providing public safety the capabilities of large file transfer and sharing, video download and other throughput intensive applications at speeds of least 384 Kbps, while data interoperability, the ability of end user devices to interact and exchange data "off network" and in a subscriber to subscriber mode, was expected to be met at the mental layer (PHY) of the wideband data device. Physical layer standardization as a means of achieving data interoperability is a less appropriate and less effective method than approaching data interoperability at the network and applications layers of the Open System Interface (OSI) Networking Model. We urge the Commission to acknowledge that public safety data interoperability, both narrowband and wideband, will be identified by the user community over time and after field experience allows the users to identify the applications and methodologies that best suits their needs. Many users will join regional data networks, which can provide users network level data interoperability, which they identified as an operating environment that best suits their needs and desired applications. Many data applications have yet to be defined and proven beneficial to users in the field. The NARPC feels that end users in the public safety community should have the opportunity to identify and define their data interoperability *before* mandatory standards for devices used in the band are met.

While we concur with the Commissions identification of the TIA-902 standard as a baseline physical layer standard for the 50 KHz 700 MHz data channels, we disagree with the positions of other parties that feel that the identification of the standard should be in concert with the

requirement of that interoperability mode in each wideband data device. Given the small amount of information available as to the history of public safety data interoperability, *proven through time and practice by users in the field*, the benefits of requiring a physical standard at this time to promote wideband data interoperability minimal and the costs associated with such a requirement would far outweigh the benefits of the physical standard being available in such a device since the use of the standard has yet to be defined within the user community. We urge the Commission to release the 700 MHz Reserve spectrum with new rules encouraging regional use of all of the 700 MHz wideband data spectrum (FCC designated Interoperability channels, General Use channels etc.) with channel bandwidths

Public safety 700 MHz channel aggregation above 150 KHz to bandwidths utilized by commercial providers in their broadband offerings and in recent public safety trials might offer cost effective alternatives in addressing public safety's emerging broadband data requirements.

Public safety should be permitted, when identified as necessary at the regional level and when information has been provided to the Commission that the user community affected by such aggregation has identified greater bandwidth as a mechanism to be used to meet their unique interoperability and performance criteria, to aggregate 700 MHz 50 KHz channels above 150 KHz. This aggregation can allow for new opportunities for users to identify regional needs and achieve their regions interoperability goals. Combined with the advancement of commercial broadband technologies, also utilizing channel bandwidths greater than 150 KHz, this flexibility can reap great rewards and promote the public safety spectrum as a flexible resource that they can utilize as they best determine their needs, not a resource reduced in effectiveness by regulatory constraints. Currently, the bandwidth limits on public safety's use of 700 MHz wideband channels can, to some degree, inhibit the development of data interoperability within a community as the desire to achieve greater throughput to facilitate applications will require a *lesser number of users per channel* to meet throughput requirements. Simply put, a greater channel bandwidth can consistently meet the needs of a greater number of users on the same channel than lesser channel bandwidths. Both the inter-operable and intra-operable data needs of end users, while differing in nature and usage from their voice needs, can perhaps be better met by implementing a land mobile environment where regional planning bodies can provide a *lesser number of channels with more users accommodated per channel* with greater bandwidth available per user per channel, which will provide a greater degree of "network based" interoperable potential with more broadband data opportunities. This is in contrast to an environment where a *greater number of channels with less users accommodated per channel* exists, requiring a greater degree of physical layer commonality to achieve interoperability at potentially greater costs to public safety agencies as the equipment utilized in more narrow systems will not parallel market based, wider bandwidth cost efficient commercial equipment and interoperability hurdles between disparate systems will have to be met to achieve the same interoperable quotient as a system utilizing wider bandwidth technologies.

The NARPC envisions that 700 MHz regional planning committees could identify the necessary bandwidth required to meet the needs of the user community within a region, paralleling the degree of cooperation provided to the region by the applicant between public safety users in the

community. The highest degree of data interoperability achieved between subscribers in a specific area may be theoretically possible utilizing a single, wide bandwidth channel for all users to share regionally, but that may not be politically feasible in many regions across the country. It is more likely that some 700 MHz wideband data channel aggregation above 150 KHz will have to co-exist with other users in their community, utilizing systems with smaller channel bandwidths and associated throughput. Within each community, regional planning committees can identify areas and users where cooperative bandwidth aggregation can be beneficial to all users while overseeing the resource to ensure available spectrum for the users.

In closing, the Commission should recognize that public safety's expectations of voice and data, as available tools used today to complete their mission, are viewed as different and distinct by the user community. The utilization of commercial networks by public safety agencies across the country today to carry agency specific Computer Aided Dispatch (CAD), Records Management System (RMS) and other data while interfacing with national databases via next generation commercial CDPD networks, is an example of how today's public safety community distinguishes between its voice and data needs and how it interprets and uses the networks required to administer both. We anticipate the public safety user community perspective on this to change over time as they become more familiar with their own data needs and begin to identify new, pertinent data applications using their current spectrum resources. As public safety begins to define its wideband data/broadband data needs through practice and experience, the Commission should acknowledge that 700 MHz wideband data channel aggregation above previously determined values is a tool that will allow regional planners to both identify and flexibly implement their future data needs using current spectrum resources. With regulatory flexibility and while utilizing the waiver process, regional planning committees can "fine tune" the users wideband data need within its 700 MHz spectrum management responsibility. Even with the possible addition of new 700 MHz spectrum that could be allocated to public safety for applications that may lead to more effective broadband capabilities (such as the 4 MHz Nextel 700 MHz guard band allocations returned to the Commission in FCC Docket 02-55) for public safety, regulatory flexibility should be encouraged to ensure that public safety's future channel implementation can always maximize the use of its available resources.

Respectfully submitted,

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